

# An Analytical Approach for Optimization of Block Chain Security for Internet of Things

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**Abstract:** *The number of smart devices or IOT devices either it may be a smart phone, smart home, tablet or any wearable devices are connected to internet are increasing day by day. Due to this numerous number of security threats are searching for loopholes that are ready to exploit any type of network. Security threats have become critical challenges against the backdrop of recent rapid raising advancements of IOT technology that demands continuous and responsive action. As a demanding technology Internet of Things (IoT) needs best information security features for effective IOT smart city and technological activity development. In this paper an Implementation of IoT system using Block Chain Security Analysis for Malicious Attack and Intrusion Prevention is presented. The block chain distributed behavior makes this system more immune and robust for a single failure. A Zero-Knowledge proof technique is applied for preventing the third party from checking user's original information. Integrity validation test and avalanche effect technique is processed for block chain, MD5 and SHA-256 which results the proposed block chain technology has better security.*

**Keywords:** Block Chain, Internet of Things, Intrusion Detection, Malicious Attack, Security Threats

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